

AMENDMENTS TO THE CLAIMS

1. Claim 1 (canceled).
2. Claim 2 (previously cancelled).
3. Claim 3 (previously cancelled).
4. Claim 4 (canceled).
5. Claim 5 (previously amended): A capillary device for vaporizing liquid, comprising:

a vaporizer component having a liquid receiving surface to receive liquid and a vaporization area in which vapor is produced from the liquid;

a heat transfer component to convey heat to the vaporization component, the heat transfer component further comprising at least one opening to release vapor at a velocity greater than zero; and

a porous insulation component capable of at least substantially shielding the liquid from the heat prior to vaporization;

wherein the vaporizer component, heat transfer component and insulation component are in annular arrangement, and further wherein fluid flow is from a center area of the device to an outer periphery of the device.
6. Claim 6 (previously amended): The device of claim 5, wherein the heat transfer component is an internal heater proximal to the outer periphery of the device.

7. Claim 7 (previously amended): A device for vaporizing liquid, comprising:

a vaporizer component having a liquid receiving surface to receive liquid and a vaporization area in which vapor is produced from the liquid;

a heat transfer component to convey heat to the vaporization component, the heat transfer component further comprising at least one opening to release vapor at a velocity greater than zero; and

a porous insulation component capable of at least substantially shielding the liquid from the heat prior to vaporization; and

wherein the vaporizer component, heat transfer component and insulation component are in annular arrangement, and further wherein fluid flow is from an outer periphery of the device to a center area of the device.

8. Claim 8 (previously amended): The device of claim 5, wherein the heat transfer component is an internal heater proximal to the center area of the device.

9. Claim 9 (canceled).

10. Claim 10 (canceled).

11. Claim 11 (currently amended): The device of claim [1] 29, further including a vapor treatment element capable of treating the vapor prior to its release.

12. Claim 12 (canceled)

13. Claim 13 (canceled).

14. Claim 14 (previously cancelled).

15. Claim 15 (canceled).
16. Claim 16 (previously cancelled).
17. Claim 17 (previously cancelled).
18. Claim 18 (previously cancelled).
19. Claim 19 (canceled).
20. Claim 20 (previously cancelled).
21. Claim 21 (canceled).
22. Claim 22 (canceled).
23. Claim 23 (canceled).
24. Claim 24 (canceled).
25. Claim 25 (canceled).
26. Claim 26 (previously cancelled).
27. Claim 27 (previously cancelled).
28. Claim 28 (previously cancelled).

29. Claim 29 (presently amended). ~~The device of claim 1, further including~~ In a capillary device for vaporizing liquid including a liquid receiving surface to receive liquid, a heat transfer component further including at least one opening for the release of vapor at a velocity greater than zero, and a porous insulation component, the improvement comprising at least one gas release passageway in gas communication with the vaporization component for the escape of dissolved gas from the capillary device, wherein the gas release passageway is independent of gas communication with the vapor release opening.

30. Claim 30 (canceled).

31. Claim 31 (canceled).

32. Claim 32 (presently amended): The device of claim [1] 29, wherein the received liquid comprises: gasoline; white gas; diesel fuel; kerosene; decane; JP8; alcohols including, but not necessarily limited to: ethanol; isopropanol; biodiesel; water; fragrance compounds; crop treatments; insect repellents; insect attractants; medical compositions including, but not necessarily limited to: antiseptics and inhalants; as well as combinations of any of the foregoing.

INTRODUCTORY COMMENTS

The status of the claims are as follows: Claims 1, 4-13, 15, 19, 21-25, and 29-32 are pending in the current application, all of which now stand rejected. The Examiner also objected to the drawings in light of the previous amendment to Claim 9.

Claims 1, 4, 9-12, 15 and 29-32 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5, 20, 10, 11, 16-18, 25, 26, and 28 of U.S. Patent No. 6,634,864.

Claims 9, 10 and 12 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement.

Claims 9, 10 and 12 also stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim subject matter which applicants regard as the invention.

Claim 13 stands rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 16 of U.S. Patent No. 6,634,864 in view of U.S. Patent No. 4,325,345 to Wilkinson.

Claims 19 and 21-24 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 16, 13-15, 20 and 29-31 of U.S. Patent No. 6,634,864.

Claim 25 stands rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 16, 13-15, 20 and 29-31 of U.S. Patent No. 6,634,864 in view of U.S. Patent No. 3,869,242 to Schladitz.

Applicants herein cancel Claims 1, 4, 9, 10, 12, 13, 15, 19, 21-25, 30 and 31 and amend Claims 11, 29 and 32. Remaining claims 5-8 are presented without change, having been previously amended. Amendments to the Claims, Remarks, and Applicants' responses to the Examiner's rejections follow. Entry of the amendments and favorable reconsideration of the application are hereby requested.